

REMARKS

The Applicants thank the Examiner for the thorough consideration given the present application. Claims 1-16 are pending. Claims 1 and 2 are amended, and claims 3-16 are added. Claims 1 and 11 are independent. The Examiner is respectfully requested to reconsider the rejections in view of the amendments and remarks set forth herein.

Foreign Priority Claim

It is gratefully appreciated that the Examiner has acknowledged the Applicants' claim for foreign priority.

Information Disclosure Citation

Applicants thank the Examiner for considering the reference supplied with the Information Disclosure Statement filed April 21, 2004, and for providing Applicants with an initialed copy of the PTO-1449 form filed therewith.

Drawings

It is gratefully appreciated that the Examiner has accepted the drawings.

Rejections Under 35 U.S.C. §102(e) and §103(a)

Claim 2 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Chevalier U.S. 6,866,223). Further, claim 1 stands rejected under 35 U.S.C. § 103(a) as being anticipated by Garner et al. (U.S. 3,802,245), in view of Bulgrin et al. (U.S. 3,195,491). These rejections are respectfully traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

Amendments to Independent Claim 1

While not conceding the appropriateness of the Examiner's rejection, but merely to advance the prosecution of the instant application, independent claim 1 has been amended to recite a combination of steps directed to a method of manufacturing an elliptic deep-drawn product, including

a first series of steps of providing an intermediate product, the steps including

placing a blank on a spinning forming die,

pressing the blank onto the forming die with a spinning bar, and

forming a substantially round formed portion of a U-shaped cross-section; and

a second series of steps of providing an end product, the steps including

placing the intermediate product in a press working die, and

causing deformation with the press working die in a semicircle of the substantially round formed portion to form an elliptic portion, and also

causing deformation in another semicircle of the substantially round formed portion to form the substantially round formed portion into a final shape.

Applicants respectfully submit that the combination of steps as set forth in independent claim 1 is not disclosed or made obvious by the prior art of record, including Garner et al. and Bulgrin et al.

First of all, the Examiner concedes that Garner et al. do not disclose that the blank is spun prior to being pressed. Although the Examiner asserts that the torus of Garner et al. includes a semicircle 100 and an outer semicircle separated by an elliptical bottom 98, there is no teaching or suggestion in Garner et al. that the bottom 98 has an elliptical shape. A fair reading indicates that Garner et al. fails to teach or suggest a press forming operation which causes deformation with a press-forming die in a semicircle of a substantially round formed portion of a U-shaped cross-section to form an elliptic portion, as recited in independent claim 1.

Further, Webster's dictionary definitions of "torus" include

1. "convex molding with semi-circular profile", and
2. "a doughnut shaped surface generated by the revolution of a conic, especially a circle, about an exterior line lying in its plane".

Nowhere in Garner et al. or Webster's dictionary is there any hint of causing deformation with the press working die in a semicircle of the substantially round formed portion to form an elliptic portion, as set forth in independent claim 1.

Bulgrin et al. merely discloses a spinning operation and a press-forming operation achieved in succession to form a circular blank into a disk wheel. There is no teaching or suggestion whatsoever in Bulgrin et al. that the blank is formed by spinning into an intermediate product including a substantially round spin-formed portion of a U-shaped cross-section, and the semicircle of the substantially round spin-formed portion of the U-shaped cross-section is caused by the press-forming to deform into an elliptic portion, as

required by independent claim 1. Thus, Bulgrin et al. do not cure the deficiencies of Garner et al.

At least for the reasons explained above, the Applicants respectfully submit that the combination of steps as set forth in independent claim 1 is not disclosed or made obvious by the prior art of record, including Garner et al. and Bulgrin et al. Therefore, independent claim 1 is in condition for allowance

Added Independent Claim 11

Independent claim 11 has been added to recite a combination of elements directed to a nacelle lip of an airplane engine, comprising:

- a lip top;
 - an upper lip portion;
 - a lower lip portion;
 - an inner peripheral portion contiguous with the lip top;
 - an outer peripheral portion;
 - an inner edge of the inner peripheral portion; and
 - an outer edge of the outer peripheral portion,
- wherein the upper lip portion has a shape of a part of an ellipse.

Support for the features set forth in added independent claim 10 can be seen, for example, in FIGS. 3 and 4.

By contrast, as can be seen in Chevalier FIG. 2, all edges of the intake lip sectors 6a appear to be portions of circles. There is no hint in the Chevalier document of an upper lip portion having a shape of a part of an ellipse, as set forth in added claim 10.

At least for the reasons explained above, the Applicants respectfully submit that the combination of elements as set forth in independent claim 10 is not disclosed or made obvious by the prior art of record, including Chevalier. Therefore, independent claim 10 is in condition for allowance.

Dependent Claims 2-10 and 12-16

The Examiner will note that dependent claim 2 has been amended, and that dependent claims 3-10 and 12-16 have been added to set forth additional novel features of the present invention.

In contrast to the novel features set forth in claim 2 as amended, the nacelle lip as shown in Chevalier document merely has a circular shape with perfect roundness so that both an upper lip portion and a lower lip portion of the round nacelle lip have a circular shape and are symmetrical to each other.

All dependent claims are in condition for allowance due to their dependency from allowable independent claims, or due to the additional novel features set forth therein.

Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §102(e) and §103(a) are respectfully requested.

*Application No. 10/828,301
Amendment dated December 1, 2005
Reply to Office Action of September 1, 2005*

*Docket No. 0943-0144PUS1
Art Unit: 3725
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CONCLUSION


Since the remaining patents cited by the Examiner have not been utilized to reject claims, but merely to show the state of the art, no comment need be made with respect thereto.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone Carl T. Thomsen (Reg. No. 50,786) at (703) 205-8000.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,
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